AMENDMENT UNDER EX PARTE QUAYLE PRACTICE

**Application No.: 10/540,863** 

Attorney Docket No.: Q88737

## **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions and listings of claims in the application:

## **LISTING OF CLAIMS:**

- 1. (currently amended): An electronic part device comprising a semiconductor circuit substrate, a semiconductor element mounted thereon in such a way that an electrode part for connection disposed on the semiconductor element and an electrode part for connection disposed on the circuit substrate are facing with each other, and a filling resin layer which fills the a gap between the circuit substrate and semiconductor element, wherein the filling resin layer comprises a liquid epoxy resin composition which comprises the following component (D) and the following components (A) to (C):
  - (A) a liquid epoxy resin,
  - (B) a curing agent,
  - (C) an N,N,N',N'-tetra-substituted fluorine-containing aromatic diamine compound, and
  - (D) a carboxylic acid vinyl ether addition product.
- 2. (original): The electronic part device described in claim 1, wherein the aforementioned N,N,N',N'-tetra-substituted fluorine-containing aromatic diamine compound as the component (C) is a compound represented by the following general formula (1):

(in the formula (1), X is fluorine and/or  $C_nF_{2n+1}$  (n is a positive number of from 1 to 10), m is an integer of from 1 to 4, and  $R^1$  to  $R^4$  are monovalent organic groups other than hydrogen, which may be the same or different from one another).

- 3. (currently amended): The electronic part device described in claim 1-or 2, wherein the N,N,N',N'-tetra-substituted fluorine-containing aromatic diamine compound as the component (C) is a reaction product of 2,2'-di(trifluoromethyl)-4,4'-diaminobiphenyl with a mono-epoxy compound containing one epoxy group in one molecule.
- 4. (currently amended): The electronic part device described in any one of claims 1 to 3 claim 1, wherein the content of the N,N,N',N'-tetra-substituted fluorine-containing aromatic diamine compound as the component (C) is set to a range of from 10 to 70% by weight, more preferably from 20 to 40% by weight, based on the entire organic components of the liquid epoxy resin composition.
- 5. (currently amended): The electronic part device described in any one of claims 1 to 4claim 1, wherein the curing agent as the component (B) is at least one of the fluorine-containing aromatic diamine represented by the following general formula (2) and a derivative thereof:

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(in the formula (2), X is fluorine and/or  $C_nF_{2n+1}$  (n is a positive number of from 1 to 10), m is an integer of from 1 to 4, each of  $R^5$  to  $R^8$  is hydrogen or a monovalent organic group, and at least one of  $R^5$  to  $R^8$  is hydrogen).

- 6. (currently amended): The electronic part device described in any-one of claims 1 to 5claim 1, which comprises a prepolymer prepared by allowing at least one of the fluorine-containing aromatic diamine represented by the aforementioned general formula (2) and a derivative thereof to react with the liquid epoxy resin as the component (A).
- 7. (original): The electronic part device described in claim 3, wherein the mono-epoxy compound containing one epoxy group in one molecule is at least one compound selected from the group consisting of n-butyl glycidyl ether, allyl glycidyl ether, 2-ethylhexyl glycidyl ether, styrene oxide, phenyl glycidyl ether, cresyl glycidyl ether, lauryl glycidyl ether, p-secbutylphenyl glycidyl ether, nonylphenyl glycidyl ether, glycidyl ether of carbinol, glycidyl methacrylate, vinylcyclohexene monoepoxide and  $\alpha$ -pinene oxide.
- 8. (original): The electronic part device described in claim 1, wherein the carboxylic acid vinyl ether addition product as the component (D) is a carboxylic acid monovinyl ether addition product represented by the following general formula (3)

$$R^{10}$$
-[CO-O-CH(CH<sub>3</sub>)-O- $R^{11}$ ]<sub>n</sub> ... (3)

(in the formula (3),  $R^{10}$  is an organic group of monovalent or more,  $R^{11}$  is an organic group of monovalent or more, wherein they may be the same or different from each other, and n is a positive integer).

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9. (original): The electronic part device described in claim 1, wherein the carboxylic acid vinyl ether addition product as the component (D) is a polyvalent carboxylic acid polyvalent vinyl ether addition product having a structural unit represented by the following general formula (4) as the main moiety

$$-[O-CO-R^{12}-CO-O-CH(CH_3)-O-R^{13}-O-CH(CH_3)]_{n}$$
 (4)

(in the formula (4),  $R^{12}$  and  $R^{13}$  are divalent organic groups, wherein they may be the same or different from each other, and n is a positive integer).

- 10. (currently amended): The electronic part device described in <del>any one of claims 1 to</del> 9claim 1, which further comprises an inorganic filler in the liquid epoxy resin composition containing the components (A) to (D).
- 11. (original): The electronic part device described in claim 10, wherein the inorganic filler is a spherical silica powder having an average particle diameter of 10  $\mu$ m or less.